

OPTIMAZING OF JIGSAW STRATEGY TO IMPROVE LEARNING ACHIEVEMENTS IN AN INCLUSIVE SCHOOL

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Abstract

Jigsaw strategy is one of the alternatives can be used in an inclusive school to improve learning achievement. The inclusive school is a formal education includes children in need special to follow learning together with learners in general. The inclusive school is expected to realize the organization of education that values diversity, it is not discriminatory to all learners who have abnormalities of physical, emotional, mental and social, or have the potential intelligence and special talents or to acquire quality education according to the needs and ability. Jigsaw strategy gives the students opportunity to cooperate with fellow students in a structured tasks. The role of the media as an important aspect in the success of learning especially mental retardation learners with varying forms of media such as shaped images, sounds/audio, video, and more. In the application of jigsaw strategy, it needs the willingness and the ability as well as the teacher's creativity to manage the class, so the teacher will be more active especially in making well-done lesson plans, class management in action, and make assignment for student in groups.

Key words: *Jigsaw*, Mental retardation, inclusive

INTRODUCTION

The 1945 Constitution article 31 paragraph 1 and legislation of the national education system Number 20 of 2003 states that every citizen shall have equal opportunities in obtaining an education. Inclusive education as a substitute special education classes part-time, full-time or extraordinary school (SLB) provides service to children in need for special education at public schools/regular. It is based on the fact that in the community there are normal children and children in need of special living in one community intact and cannot be separated.

The inclusive school must prepare everything in order to optimize the potential of learners. One of the components of the school inclusive i.e. teachers or educators who have the task of drawing up and implementing the assesment on all children to know their needs and abilities and perform initial capability identification and characteristics of each child in depth, both in terms of ability or his in ability in absorbing subject matter, speed or slow in learning, and

behavior, so that each activity each child gets the attention and the appropriate treatment. Thus, identification and assessment is a stage or series of activities of the Ministry for the children in need special.

As for the task of educators in school inclusive of the i.e. create a conducive learning climate so the kids feel comfortable learning in the classroom/school through effective learning conditions with the interest and attention of students in learning, learning achievements are deeply connected with the learners. If there is an interest to learn, then learning achievement increases. Vice versa, the educator as instructional Planner is expected to be able to carry out activities of teaching and learning effectively.

Learners who have interest in certain subjects tend to give greater attention towards the subject. To foster interest, educators should be motivating, motivational learning will interest learners achieve success in their learning. If the success is reached then it will affect the learning achievements of students being good, and vice versa if no interest from learners in following a learning

achievements thus not experiencing an increase.

One of the success factors also influenced teaching and learning potential of educators. The potential intended among other capabilities in mastering the material, managing the classroom, and use various models of learning where appropriate. Jigsaw learning in model using the approach to teaching through small groups of learners to collaborate in maximize teaching and learning conditions. According to Trianto (2014:124) learning models that give the opportunity to the Jigsaw i.e learners in General to share with other learners in terms of teaching as well as taught, there are two types of model learning jigsaw i.e. Type I students only learn certain concept that would become his speciality while other concepts obtained through discussions with your friends in a group are type II and every learner obtained an overall concept of learning opportunities (scan on read) before learning her specialty to become expert.

The chosen model of learning to improve learning achievements of jigsaw, based on several reasons among others that still many teachers use only methods lectures without any extra learning model variations ... able to build interest learners to study the effect on the learning achievements of study the effect on the learning achievements of students. Then the effort improved learning achievement learners not only learn and accept what is presented educators with methods lectures, but can learn from other learners. As well as train the learners to learn independently and cooperate with his friend.

DISCUSSION

Jigsaw Strategy

Jigsaw strategy has been developed by Elliot Aronson and his friends from the University of Texas USA, later adopted by Slavin and friends at John Hopkins University. In general the application of the learning model jigsaw as follows: 1) Classes are divided into several groups; 2) Each student group consists of 5-6 people that are heterogeneous, both in terms of ability,

gender, culture and so on; 3) Each group is given a learning materials and learning tasks that must be done; 4) From each group taken a member to form a new group (the Group of experts) and discusses the same task and discuss the assignment; 5) Members of the group of expert then back again to the original group (origin), to teach the members of his group with the discussion anyway; 6) During the process of learning in a group of teachers act as facilitators and motivators; 7) Every week or two weeks, doing teacher evaluation, both individual and in groups to find out the progress of learning to learners; 8) For learners and the group that scored a perfect study results were given awards. And also if all groups obtaining perfect results then obliged to be awarded.

According to Priyanto (Wena, 2013:194-195) learning model steps in Jigsaw classes as follows.

- 1) Formation of Origin
Students divided consists of several groups (each group of members 4-5 persons with ability of heterogeneous);
- 2) Origin of Group Learning
Each Member of the original group studied the subject matter that would be the expert. The subject matter is given to students in the form of text has been divided into several sub-material.
- 3) Establishment of the Group of expert
Origin of the task group Chairman to each of its members to be expert in one sub-material lesson. Then each of the same sub-material experts from the different groups joined to form a new group called the Group of experts. For example, if the material is conveyed about the excretion system. Then a student from one group of them learn about the excretion system. Then student from one group of them learn about the kidney, as the lungs, skin, or liver.
- 4) Expert discussion group
Members of other groups who are already studying the sub-material equally met in one group and mutual discussion to communicate and solve problems related to sub-material lesson that became its responsibility.

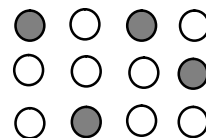
- 5) Original discussion group (Parent)
Members of the Group of expert returned to the original group respectively, then each original group members explain and answer questions regarding the sub-material lessons into his expertise to other members of the original group. This is turn until all members of the original group have been getting a turn.
- 6) Class discussion
With the guided by teachers in class discussion discuss sub-material and other important concepts, the teacher role for trying to fix the wrong concepts on learners.
- 7) Awarding Quiz
The quiz is done by individual learners. The value obtained by each Member of the original group summed up to obtain the total value of the group.
- 8) Granting the award Group
To the group that obtained the highest number of grades awarded in the form of the Charter and the bonus value.

In doing the groping done should pay attention to some of the following.

- 1) Flexible
Learners can be moved from one group to another group so that learners have the opportunity to study with your classroom as often as possible. This helps the students to have an attitude of tolerance and teachers can find talent learners.
- 2) Do not label a sluggish learners learn
In the classroom may be found learners who are slow in learning math, but they can finish the job that is practical. Teachers should be careful. When getting the learners who feel have failed then the condition or feeling it will take on a real failure. They will lose the spirit of learning, because they feel unappreciated. They begin to believe his inability, and finally they are desperate, even dropping out of school. Some of them prefer to earn money for his family

- than go to school.
- 3) Prepare the material to facilitate group work
Prepare game cards, assignments, and other materials in the learning that can be used repeatedly. Creation of learning materials can involve learners. This way may relieve duties in addition to teachers,also gave a chance learners learn, enhance trust and their capabilities.
 - 4) Seating position
Teachers seeking seating arrangements to make it easier and faster to form effective group work. Teachers engage learners study together to arrange and organize their own class tailored to the activities that will be carried out.
 - 5) A consistent routine
Learners are given the understanding of a series of activities they should be doing. The teacher explained the reasons why they had to move the group. The teacher explained the steps in carrying out these activities and what are their duties. Teachers need to develop such routines as early as possible.
 - 6) Provide the opportunity all learners to become Group Chairman
The Chairman of the Group has a major role in helping teachers deliver instruction, such as doling out material, directing the group through the activities and report the results.

For more details can be seen from the following illustration:



The explanation for all groups

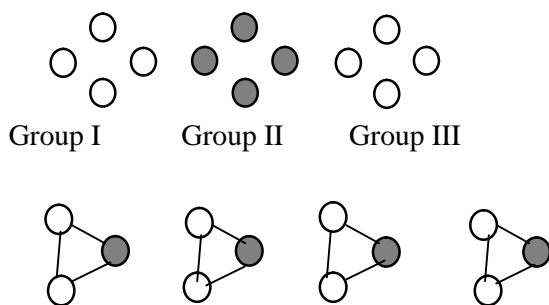


Figure 1. Jigsaw groups description

The Learning Achievements

The learning achievements of a sentence made up of two different words meaning "achievement" and "study". According to Djamarah (2012:19-20) mentions that the achievements are the result of an activity that has been carried out, created, both individually and group. In fact to get achievement full of struggle of various challengers to be faced in order to achieve this as well as the tenacity and optimism of the self becomes the deciding factor the achievement fulfillment. While the study according to the Djamarah (2012:21) the notion of learning is a process of work done to a person to obtain a change in the behaviour in the new overall, as a result of his own experience and interaction with the environment. Thus, the learning achievements are the results obtained in the form of traces that result in changes in the individual as a result of activities learning. The learning achievements of learners is the result of various efforts and resources reflected in the participation of the study conducted in the learners learn the subjects taught by educators. As for the main functions of the learning achievements among others things: 1) learning achievements as an indicator of the quality and quantity of knowledge that has been controlled by the learners; 2) learners as a symbol of the gratification of desire to want to know. Psychologists typically refer to it as the "mainstream" public curiosity and the needs of man; 3) accomplishment of learning as information materials in educational

innovation; 4) learning achievements as an indicator of internal and external call from an educational institution; the learning achievements and 5) can be used as an indicator of absorbance learners. Learners became the primary focus to be aware of. Factors that influence the learning achievements stems from internal factors and external factors. External factors relate to human relationships that occur in social situations including family, school, friends and society in General. Educators played an important role in the process of achieving the accomplishments. The learning process needs to take place two-way actively so that learning goals can be achieved to the maximum. Meanwhile, internal factors are the result of interactions in the individual in order to achieve feats of physical factors, among others, and the intellectual factors include potential factors in the form of intelligence and talent, real skills factors i.e. certain personal items. Intelligence is one of the factors that influence on high low achievement of learning. intelligence is the basis of the potential for the achievement of the learning results, meaning that learning outcomes are achieved will depend on the level of intelligence, the higher the intelligence it will be the higher level learning outcomes also will be achieved, as well as vice versa, but there are still many other factors that influence the learning achievements of students.

Mental Retardation

The term mental retardation comes from the Sanskrit, meaning a loss of tuna, less; grahitameans thinking (Mumputiarti, 2000:25). According to Taringan (2000:30) suggests that there are two criteria of the individual is considered mental retardation, namely: first, the intelligence of the average under

normal child his age, and the second deficiency in the adaptation behavior that occurs during development. According to Delphie (2006:1) disabilities grahita tuna (double handicap) is a mental disorder that has, or behavior due to the intelligence of the disturbed, mentally disabled usually happen in one State with physical disabilities so called double disability. For example the defects they experienced intelligensi accompanied with impaired vision, there are also accompanied by hearing loss.

As for Dole, according to Edgare (Mumpuniarti, 2000:26) features of a person considered mental retardation if marked: 1) is not a socially-enabled and can not manage himself to the level of the age of majority; 2) Mentally under normal; 3) Late in his birth; 4) Late adult level; 5) mental Retarded due to the bringing of the lineage or disease; and 6) cannot be cured. Grahita tuna can be divided are classified into three kinds viz. mild mental retardation, severe mental retardation and mental retardation. Mild mental retardation is called also maron or debil. This group has an IQ between 68-72 according to Binet. While according to Weschler scales (WISC) children who have mental retardation intellectual intelligence/IQ 69-55. They are still able to learn reading, writing and simple counting up to a certain level. Usually only up to grade IV elementary school. With the guidance and education of the mentally retarded children, good light on time can earn for himself.

In school inclusion of the majority accept children who have mild mental retardation with characteristics as follows, 1) has an IQ between 50-70 (standard WISC; 2) two times in a row does not ride class; 3) is still capable of reading, writing and counting is simple; 4) cannot think in the abstract; 5) low concentration ability); 6) experience

difficulty to adapt to new environments (adaptability); and 7) less able to take care of themselves.

Inclusive Schools

The inclusive school is a formal education includes children in need special to follow learning together with learners in general. Inclusive schools provide a decent education, challenging, but adapted to the abilities and needs of every learner. The school provides assistance and support that can be given by educators, in order to be successful in learning to learners in accordance with its potential. the inclusive school must be accessible to all learners in accordance with the obstacles and potential as well as the needs of developers who are diverse, both in terms of policy and infrastructure management, curriculum and learning, evaluation as well as the financing of education. in accordance with REGULATION number 19 in 2005 about national standards of education, educational units must meet minimum standards of educational units, namely, the standard of competence of graduates, standard contents, standard process, standard of the workforce, and infrastructure standards, standards management, standards, assessment and financial standards. every indicator of the standard of education, must be met by each unit of education. In this case the education unit, the unit of education may set a higher standard of education of education standards. Educational units with national standards of education for inclusive education providers will have to modify the standard indicators of education for inclusive education so that the held can walk and well developed. The indicators were developed specifically to facilitate the monitoring and self-evaluation within the Organization of education for inclusive. Some education indicators that can be used to perform a measurement against a unit of education in the implementation of inclusive education providers, including the following: a) institutional Indicators); b) indicator of the curriculum, learning and evaluation; c) Workforce Indicators; d) indicators of the student; e) indicators of

infrastructure; f) and financing indicators. Each of the indicators of developed items by a number of criteria to describe the 'level' of performance 'as an inclusive school. Schools can do its own evaluation and to process the results, and then find out its position as an inclusive school, including positions that are already good, moderate, or less once.

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CONCLUSION AND SUGGESTION

Based on the discussion that has been submitted, the conclusion to be drawn as follows that Jigsaw strategy is one of the alternatives can be used in an inclusive school to improve learning achievement for mental retardation students. Jigsaw strategy is psychologically suitable with the student's social development in their age of elementary school and suitable with their characteristic that is to enjoy working in groups. The teacher must be creative to manage the class, so the teacher will be more active especially in making well-done lesson plans, class management in action, and make assignment for student in groups.

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